

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------|----------------------|---------------------|------------------|
| 10/649,685 | 08/28/2003 | | Hirofumi Watanabe | Q76895 | 5665 |
| 23373 | 7590 | 11/28/2005 | | EXAM | INER |
| SUGHRUE | MION, | PLLC | ENGLE, PATRICIA LYNN | | |
| 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 | | | | ART UNIT | PAPER NUMBER |
| WASHINGT | ON, DC | 20037 | 3612 | | |

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|--|
| | 10/649,685 | WATANABE, HIROFUMI |
| Office Action Summary | Examiner | Art Unit |
| | Patricia L. Engle | 3612 |
| The MAILING DATE of this communication appeared for Reply | opears on the cover sheet w | ith the correspondence address |
| A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a report of the period for reply is specified above, the maximum statutory, perion for reply within the set or extended period for reply will, by stature Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply within the statutory minimum of third will apply and will expire SIX (6) MON te, cause the application to become AE | reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |
| Status | | |
| 1)⊠ Responsive to communication(s) filed on <u>03 (</u> 2a)⊠ This action is FINAL . 2b)□ Thi 3)□ Since this application is in condition for allowed closed in accordance with the practice under | is action is non-final. ance except for formal matt | • |
| Disposition of Claims | | |
| 4) ⊠ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) 11-20 is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-10 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/ | awn from consideration. | |
| Application Papers | | |
| 9) ☐ The specification is objected to by the Examin 10) ☑ The drawing(s) filed on <u>06 May 2005</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E | a) accepted or b) object e drawing(s) be held in abeyar ction is required if the drawing | nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. § 119 | | |
| 12) ☑ Acknowledgment is made of a claim for foreig a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☑ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority application from the International Bureat* * See the attached detailed Office action for a list | nts have been received. nts have been received in A onty documents have been au (PCT Rule 17.2(a)). | pplication No received in this National Stage |
| Attachment(s) | ∆ □ | (DTO 442) |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date <u>9/13/05</u>. | Paper No(s | Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) |

DETAILED ACTION

Election/Restrictions

Newly submitted claims 11-20 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the door opening/closing apparatus can be used on any type of door

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-20 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

2. The drawings are objected to because the corrections to Fig. 6 are in an informal drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

Art Unit: 3612

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1-4, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Cleland et al. (US 2003/0030299).

Regarding claim 1, Cleland et al. disclose a door-opening/closing apparatus (28) for a vehicle, comprising: a body having an opening (14); a door (18) for closing the opening of the body; a driving unit (534) that drives the door (18) to close the door; a door movement detection unit (506,204) that detects a closing movement of the door and generates an movement detection output; and a judgment unit (512) that judges whether the door is attempted to be closed and generates a closing attempt output; and a motor control unit (502) that, in response to the movement detection output generated when the door movement detection unit (506) detects the closing movement of the door, and when the judgment unit judges that the door is attempted to be closed, controls the driving unit (534) to automatically close the door.

Page 4

Regarding claim 2, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door movement detection unit (506) detects the movement of the door by monitoring an operation of the driving unit (paragraph 0135-Hall Effect Sensor).

Regarding claim 3, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door movement detection unit detects the movement of the door by detecting a rotation angle (paragraph 0117) of a hinge that supports the door.

Regarding claim 4, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door movement detection unit (204) detects the movement of the door by detecting expansion and contraction of a damper (530) mounted between the body and the door.

Regarding claim 9, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door (18) is a back door (Fig. 1) that closes a tailgate formed on a rear portion of the body.

Regarding claim 10, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door is a side door (paragraph 0046, line 8) that closes a side gate formed on a side portion of the body.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3612

6. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleland et al in view of Pudney (US 2003/0216817).

Regarding claims 5-7, Cleland et al. disclose that the door opening system may include a plurality of inputs to judge that the door is requested to be opened or closed. Cleland et al. do not disclose a sensor that detects a human touch as one of the inputs. Pudney discloses that touch sensors (paragraph 0031 and paragraph 0032), both electrostatic and temperature, are well known as a method of providing user input to open or close a door. It would have been obvious to one of ordinary skill in the art to include a touch sensor, either electrostatic or temperature, as an input to the control system to request opening or closing of the door. The motivation would have been to allow the operator of the vehicle to open the vehicle by a simple touch when they cannot access their keys.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cleland et al in view of Flick (US 2003/0001728).

Regarding claim 8, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the body includes sensor that determines if the vehicle is in motion before opening or closing the door (paragraph 0156). Cleland et al. do not disclose that this sensor is a vibration sensor. Flick discloses that vibration sensors are used to detect movement of the vehicle (paragraph 0002). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a vibration sensor to determine whether or not the vehicle is moveing and therefore whether or not the door should be open or closed.

8. Applicant's arguments filed May 6, 2005 have been fully considered but they are not persuasive. The applicant argues that Cleland does not disclose a driving unit, a door movement detection unit, a judgement unit and a motor control unit. The Examiner disagrees as explained above in the rejection of claims 1-4, 9 and 10. The Applicant also requested that the Examiner provide evidence that touch sensors and vibration sensors are well known. The Examiner has done so as explained in the rejections of claims 5-8.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/649,685 Page 7

Art Unit: 3612

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Engle whose telephone number is (571) 272-6660. The examiner can normally be reached on Monday - Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L Engle Primary Examiner Art Unit 3612

ple November 18, 2005